

**METHOD AND APPARATUS FOR
MINIMIZING SPECTRAL INTERFERENCE
DUE TO WITHIN AND BETWEEN SAMPLE VARIATIONS
DURING *IN-SITU* SPECTRAL SAMPLING OF TISSUE**

ABSTRACT

10 An apparatus and method for reproducibly interfacing a living tissue sample to the measurement probe of a spectrometer instrument *in-situ* minimizes spectral interference related to sampling variations. A minimal contact subject interface includes supports replaceably mounted on a base. An optical coupling means, such as a fiber optic probe, contacts the measurement site through a probe aperture in the base. During use, a subject rests an extremity on the support elements, so that the extremity is reproducibly positioned and supported in relation to the optical coupling means. The supports have a small contact area, minimizing contact with the skin at the measurement site. The interface module is adjustable to fit any subject.

By reproducibly positioning and supporting the body appendage using minimal contact supports, spectral interference due to variations in placement, applied pressure, and temperature transients secondary to contact with the interface module are greatly minimized.